ENHANCEMENT OF THE PHILIPPINES DISASTER RESPONSE CAPABILITY

BY

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USAWC STRATEGY RESEARCH PROJECT

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by

Colonel Bienvenido Gerardo C. Casis, Jr. Philippine Army

Dr. Janeen Klinger Project Adviser

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U.S. Army War College CARLISLE BARRACKS, PENNSYLVANIA 17013

ABSTRACT

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The Philippines' membership in the United Nations morally obligates her to come to the aid of a disaster-stricken member-nation when so requested. However, it would depend on the Philippines disaster response capability to be able to send a suitable contingent for any particular undertaking. While the Philippines provides for her own disaster response force during natural calamities, many times though, contingents from other countries provide valuable contributions to the overall effort to assist a beleaguered populace.

This paper reviews the capability of the government and the Armed Forces of the Philippines to respond to disasters, primarily focusing on natural catastrophes. Review of previous studies and consideration of other countries' disaster response management and capabilities were undertaken in order to gain insights which can improve the Philippines' capability. The goal of this study is to encourage the Philippine government to upgrade her disaster response capability in order to respond to victims of natural calamities with better service and anywhere in the world. This approach will

foster better friendship and facilitate enhanced goodwill with other nations, and is a strategic approach to international peace.

ENHANCEMENT OF THE PHILIPPINES DISASTER RESPONSE CAPABILITY

No matter how prepared we think we are, we must work everyday to improve.

—Frances Fragos Townsend Assistant to the President for Homeland Security and Counterterrorism 23 February 2006¹

The Philippines is a bona fide member of the United Nations. As such, the Philippines has been a recipient of several UN humanitarian activities during the calamities which ravaged the country in past and recent years. Understandably, the UN disaster response is brought about by its obligation to its member-nations to send humanitarian missions in places where natural calamities strike. With the benefits received from the UN and other countries, the Philippines is therefore morally obliged to contribute manpower, equipment, materials and even financial support to member-countries devastated by natural disasters.

The Philippines renounces war as an instrument of national policy; hence, it is consistent that the country should participate actively in non-aggressive endeavors that pursue goodwill and friendship with the community of nations. With manpower and experience in disaster response, the Philippines can assist disaster-stricken areas of the world. The Philippines capability to send an appropriate contingent to disaster-affected countries depends largely on the current status of her disaster response force. This endeavor, if available, will surely project a favorable image of the Philippines internationally and will serve to foster better friendships and enhanced goodwill with other nations.

This humanitarian mission of disaster response, locally as well as internationally, would focus on natural disasters only because natural disasters entail less complexity

and diplomatic red tape. On the other hand, man-made² calamities often necessitate thorough investigations which tend to exclude foreign assistance from the very outset. The best way to analyze the country's disaster response capability is to compare it with the system used by other countries. Previous studies and research will provide a solid foundation for sensible recommendations. The objective of this paper is to recommend relevant changes which will improve the country's capability for extending disaster response assistance to other disaster-stricken countries.

In order to make recommendations for policy changes, this paper begins with some key definitions. Then the paper describes and critiques current Philippine disaster preparedness policies and compares the whole system and capability with the more successful programs from neighboring countries. The study also discusses why the Armed Forces of the Philippines is highly preferred over the other government agencies when conducting disaster response operations. Finally, the paper concludes by offering some recommendations for improving disaster response capability.

The Disaster Phenomenon

A *natural disaster* is the consequence when a potential natural hazard becomes a physical event (e.g. volcanic eruption, earthquake, landslide, and tsunami) that interacts with human activities. Human vulnerability, caused by the lack of planning, lack of appropriate emergency management or the event being unexpected, leads to financial, structural, and human losses. The resulting loss depends on the capacity of the population to support or resist the disaster, their resilience. This understanding is concentrated in the formulation: "disasters occur when hazards meet vulnerability." A natural hazard will never result in a natural disaster without vulnerability, e.g. strong

earthquakes in uninhabited areas. The term natural has consequently been disputed because the events simply are not hazards or disasters without human involvement. The degree of potential loss can also depend on the nature of the hazard itself, ranging from a single lightning strike, which threatens a very small area, to impact events, which have the potential to end civilization.³

Disasters having an element of human intent, negligence, error or the ones involving the failure of a system are called *man-made disasters*. Man-made hazards are in turn categorized as technological or sociological. Technological hazards are results of failure of technology, such as engineering failures, transport accidents or environmental disasters. Sociological hazards have a strong human motive, such as crime, stampedes, riots, and war.⁴

Regardless of origin—from hurricanes to earthquakes, blackouts to terrorist attacks—disasters can seem overwhelming. Yet their impact need not be crippling.

The effects of disasters are borne not only by the poorest in the locality but by the national government as well. Everyone is affected by disasters, either directly or indirectly. The stakeholders include the following: poor people who seem to have the least capability to deal with disasters; children, the old and the less-privileged elements of the society who suffer long-term losses; the middle class who equally share the immediate effects of the disaster; the small businessmen who also sustain losses in their enterprises; and, the rich people at some lesser degree of inconvenience.

Descriptor	Magnitude	Annual average
Great	8 or higher	1 ¹
Major	7–7.9	17 ²
Strong	6–6.9	134 ²
Moderate	5–5.9	1,319 ²
Light	4–4.9	c. 13,000
Minor	3–3.9	c. 130,000
Very minor	2–2.9	c. 1,300,000

Table 1: Frequency of Earthquakes Worldwide

Table 1 above shows the frequency of earthquakes and the estimated death tolls from 1900 to 1990 (1-based on observations since 1900; 2-based on observations since 1990). These were those which had been recorded. The National Earthquake Information Center (NEIC), U.S. Geological Survey, estimated that several million earthquakes occur annually throughout in the world. Many go undetected because they hit remote areas or have very small magnitudes.

Earthquakes are perhaps the most devastating of the natural disasters.⁷ They occur suddenly, with or without warning and occur almost any time. Their effects normally create sudden movements and alterations of the earth's surface which become so destructive most especially if they strike at the heart or even periphery of built-up

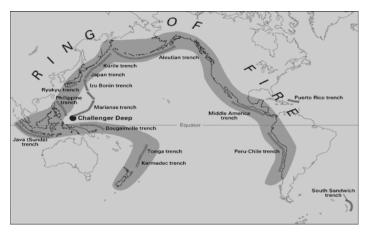
areas. They can reduce and level cities within seconds leaving rubbles, injuries and death. Edifices of great resistance against earthquakes have been computed and erected with the capacity to withstand earthquakes of magnitudes of up to 10. The "great earthquakes" are still to come, however, no one really knows their destructive capabilities.

A second type of natural disaster is typhoon. At an average, five (5) strong typhoons⁸ visit the Philippines annually bringing other related disasters such as flashfloods, mudslides, long-lasting floods, devastated structures, destroyed crops and orchards, killed cattle and livestock, human deaths and relocations, diseases and epidemics, and dislocations of economic as well as social activities of the populace.

Asia is the most disaster prone region in the world. In the last century it is estimated that 80% of meteorology-related disaster phenomena has occurred in the area. According to the Asian Disaster Preparedness Center (ADPC), a multi-national educational disaster management center, disasters have claimed millions of lives and seriously affected the living condition and livelihood of about one billion people worldwide.⁹

The Philippines lie directly along the arc of "The Pacific Ring of Fire" which practically covers the circumference of the great Pacific Ocean. (Figure 1 – The Pacific Ring of Fire. *Source: Venkatraman, Disaster Management of Earthquakes in the Philippines, 2005*). ¹⁰ This makes the Philippines very prone to natural disasters such as earthquakes, typhoons, floods, mudslides, flashfloods, and even tsunamis. This condition makes it imperative for the Philippines to have a capable and ready world-

class disaster response force which could be deployed quickly to local areas in the archipelago, Asia and elsewhere.



The Philippine Archipelago occupies the western ring of the Pacific Ocean (Western Segment of the Pacific Ring of Fire), a most active part of the earth that is characterized by an ocean-encircling belt of active volcanoes and earthquake generators (faults).

Figure 1: The Pacific Ring of Fire

The Philippines Disaster Response Management System and Capability

On June 11, 1878, Presidential Decree No. 1566 (PD 1566)¹¹ was signed and issued by President Ferdinand Marcos to strengthen the Philippine disaster control and establish the national program on community disaster preparedness. The decree created the National Disaster Coordinating Council (NDCC) as the highest policy making body on disaster control and preparedness. It also prescribed some guidelines on the organization of Disaster Coordinating Councils at the regional and local government levels, the tasks of the National Disaster Coordinating Council members and the guidelines to be observed in all planning activities on disaster operations. The ten fundamental policies under PD 1566 are:

- 1. Self-reliance, self help and mutual assistance are encouraged.
- 2. All available resources are used before asking for assistance.

- 3. Primary responsibility rests with government agencies in the area in coordination with the people.
 - 4. All entities are to have emergency plans.
- 5. Planning and operation is also expected at barangay (the smallest unit of political subdivision of the Philippines similar to a borough) level.
- 6. In the absence of regional government, national government officials at the regional level shall be led and controlled by the Regional Commissioner or official designated by the President.
 - 7. The responsibility of leadership rests with the elected officials, e.g. mayors.
- 8. The provincial governor exercises operational control when a disaster covers multiple cities.
 - 9. The national government exists to support the local governments.
- 10. Exercises and drills are to be conducted at al levels, principally at the barangay level.

The National Disaster Coordinating Council (NDCC) is the highest policymaking, coordinating and supervising body at the national level for disaster management in the Philippines. It advises the President on the status of national disaster preparedness and management plans. It recommends when the President should declare a state of calamity and the release of National Calamity Fund. The Council is represented by the different secretaries of the departments and agencies of the civil government, and various NGOs¹², chaired by the Secretary of National Defense.

In actual disaster response operations, civilian business establishments and concerned private corporations donate materials, food and financial support, either

directly or through the NDCC and local government offices to the victims. Also, these entities provide manpower and equipment to assist the government in alleviating the living conditions of the disaster-stricken populace. More often than not, the local government and the populace are not able immediately to react and take the necessary rehabilitation since their first concern is normally the safety of their individual families. Such a situation necessitates the presence and assistance of the national government to re-establish order and normal functioning of the different basic services needed by the affected populace.

In compliance to PD 1566, the NDCC formulated the NDCC Calamities and
Disaster Preparedness Plan¹³ on 24 August 1988. The primary objectives of this plan
are to: save lives, prevent needless suffering, protect property and minimize damage
during disasters and calamities. It embraces all conceivable contingencies, short of war
emergencies, making use of all available government and private resources. This plan
presents among others, the composition and responsibilities of the national organization
for emergencies, the organization that will provide the vehicle for a concerted and
coordinated disaster control effort from the National down to the Regional, Provincial,
City/Municipal and Barangay levels. Under this plan, the National Disaster Coordinating
Council shall exercise direction and control, through the Office of Civil Defense, over all
emergency operations from the Regional down to the lowest political
subdivisions/councils. As one of the NDCC member-departments, the Department of
National Defense is tasked through Armed Forces of the Philippines, with the following:

1. Establish communication linkages and makes these available for disaster operations.

2. Assist the Philippine National Police in providing security coverage in disaster areas.

Assist in the reconstruction of damaged national and local roads and/or bridges, structures of facilities.

- 4. Assist in providing transportation facilities for the rapid movement of relief supplies and personnel and for evacuation of disaster victims.
 - 5. Organize reaction teams in all military installations.

The Constitution of the Philippines mandates the Armed Forces of the Philippines (AFP) as the protector of the people and the state. Its traditional role is to secure the sovereignty of the state and the integrity of the national territory and given the primary role or responsibility on matters involving suppression of insurgency and other serious threats to national security. The military is regarded as an important and capable entity for disaster management due to its training, equipment, and organizational structure. It is viewed as a capable force that can perform a wide array of emergency actions and operate under adverse conditions. In addition, the majority of the standard and day-to-day operations of the military organization parallel public emergency measures. In line with the tasks specified in the Calamities and Preparedness Plan, the AFP formulated Standing Operating Procedure (SOP) Nr 15 also known as the AFP Calamities and Disaster Prepared Plan. This SOP prescribes the tasks of different AFP units during calamities and disasters.

The Armed Forces of the Philippines (AFP) is preferred in the conduct of disaster relief operations for the following reasons:

- 1. The AFP is the only potent force available in capability and numbers to rise to the occasion.
- 2. The speed of reaction of the AFP and its ability to operate under adverse situations can be exploited by the nation.
- 3. The civil population places immense faith in the abilities of the army and the very sight of the AFP is reassuring and generates increased self-confidence in times of disaster. This in turn could have positive fallout, as a reassured populace would be in a better position to help themselves.
 - 4. Professional tasks involving the army are executed promptly.
- 5. The AFP is a highly motivated and disciplined force with valuable resources and ethos.
 - 6. The force members place value on serving their countrymen.

The NDCC Disaster Management Cycle Model¹⁷ – The National Disaster Coordinating Council (NDCC) adopts a four-component emergency management framework. This framework involves mitigation, preparedness, response and rehabilitation and is graphically illustrated in Figure 2.

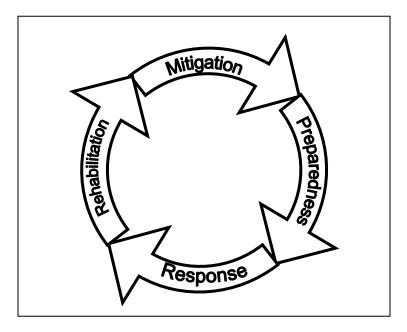


Figure 2. NDCC Conceptual Disaster Management Cycle

Mitigation refers to measures or programs that seek to minimize the impact of a natural or a man-made hazard on a nation or a community in terms of casualties and damages. It also refers to measures designed to prevent a natural phenomenon from causing or resulting to disasters or other related emergency situations.

Preparedness, the second element in the cycle, refers to pre-disaster actions and measures being undertaken to avert or minimize loss of lives and properties, such as, but not limited to, community organizing, training, planning, equipping, stockpiling, hazard mapping and public information and education initiatives.

Response, the third element, refers to any concerned effort by two or more agencies, public or private, to provide emergency assistance or relief to persons who are victims of disasters or calamities, and in the restoration of essential public activities and facilities.

Finally, rehabilitation refers to the process which restores the affected communities/areas or damaged public infrastructures to their normal level or their actual condition prior to the occurrence of the disaster or calamity.

Weaknesses in the Disaster Response System

Much serious research has been conducted regarding the efficiency and effectiveness of the Philippines disaster response capability which mostly focused on the AFP and their capabilities. But much to the dismay of the researchers little has been done to improve that capability. The complacency perhaps lies with the fact that the government optimistically expects calamities not to occur often. This is a good premise for superstitious people but a disastrous proposition for responsible management. Paradoxically, calamities do occur annually, 18 yet the government reacts only when disasters are there already.

It is always better to examine the effectiveness of the principles and fundamental tenets where actions of concerned agencies are based in order to make the necessary amendments so that future actions will be improved. It is imperative to analyze their applicability and defects in order for the government to deliver appropriate responses. Some principles have already outlived their usefulness and innovative approaches would be more advantageous for the present times.

A critical assessment of the ten fundamental policies under PD 1566 can provide revision and updating. Eight of the policies will be noted and then discussed. Self-reliance, self help and mutual assistance, the initial principle, has always been relegated to the Filipino attributes of self-sufficiency and resilience, especially when assistance from the national government seems quite remote. This is good if the local government is organized and well prepared to meet the effects of disasters. On the contrary, however, the local government is not prepared; hence, the reality is an erosion of the people's faith in the national government. Furthermore, this principle quite negates the ninth fundamental principle which states that the national government exists to support

the local government. This could be better deleted from the fundamental policies or otherwise worded more positively in order to provide a better hope for the local populace that the national government fully intends to look after the welfare of the people.

The second policy of PD 1566 asserts that all available resources are to be used before asking for assistance. In times of serious calamities, why would assistance depend on what is available in the stricken locality? It should always be assumed that beleaguered people would need basic items for survival. Hence, the national government should demonstrate immediate assistance and not rely on what the victims have. This policy should be government-centric, focused on the ability of the government to respond and provide resources, and not delegate the responsibility to the local folks suffering calamity.

The third policy of PD 1566 maintains primary responsibility rests with government agencies in the area in coordination with the people. While not an unreasonable idea, this unfortunately does not happen often, especially at the lowest level of the government, the barangay. Even more disappointing is at the level of the municipal authority. There are only a few, perhaps, which could muster their capability to counter the effects of the disaster. At this point, normally, it is a free-for-all business – each family to its own first. People, except for some concerned citizens' initiative, tend to simply wait for help rather than organize themselves and start the response. This could be attributed to the local government's leadership and organization and could be improved by institutionalizing exercises and drills for disaster response.

The Barangay Disaster Coordinating Council (BDCC) is the first line of defense against calamities. Inciong (1985)¹⁹ analyzed and evaluated the effectiveness of the BDCC in the implementation of the Barangay Disaster Plan. The effectiveness of its implementation was based mostly on the people's perception of the capability and performance of the BDCC during natural emergencies. The study found some weaknesses in organization and performance particularly in training and in education of the barangay people on community disaster preparedness.

The fourth policy of PD 1566 also specifies that all entities are to have emergency plans. This is related to the preceding policy where it is imperative for all government agencies in all levels of governance to have their respective emergency plans and contingencies. A plan known and rehearsed would definitely mitigate the effects of disasters. This must be given proper emphasis and importance since natural calamities do occur almost regularly especially in specific areas of the country.

Insauriga and Tayag (2001)²⁰ both from the Office of Philippine Institute of Volcanology and Seismology made mention in a report entitled "The July 1990 Luzon Earthquake, Philippine Experience" the media assessment on the organizational response to the earthquake in July 1990. The assessment pictured the disaster as widespread and described the rescue and relief efforts as disorganized, uncoordinated, slow, inadequate, unprepared, and ill equipped. It also mentioned the initiative of the NGO's in taking the lead in the disaster response operations which should have been performed by the government.

The fifth pillar of PD 1566 notes that planning and operation is also expected at barangay level. This too relates to the two preceding policies. The problem however

would always be the funding for such activities. Funding for both planning and operation should be incorporated in the local government annual budget. This activity should be the responsibility of the Barangay Disaster Coordinating Council (BDCC). The weakness of the BDCC should be strengthened and given priority especially in the localities which lie in the paths of typhoons.

The sixth policy under PD 1566 stipulates that in the absence of regional government, national government officials at the regional level shall be led and controlled by the Regional Commissioner or official designated by the President.

The problem is normally borne immediately by the AFP where the first reaction of the regional or provincial government is to give the task to military in the area. There must be a contingency for any calamity at that level of government. A prepared force must be activated immediately even prior to the onslaught of the disaster. They should already be placed on alert for immediate deployment once the calamity occurs. This should be separate from the military capability, where the uniformed service will be an augmentation to the overall effort. Manpower, equipment, organization and funding must already be emplaced as an integral part of the regional government.

The seventh policy states that the responsibility of leadership rests with the elected officials, e.g. mayors. This policy must be given proper educational substance which means that politicking during disaster must be pushed aside. Responsibility must be reemphasized even up to the lowest governmental level of authority, the barangay officials. They are elected by the people; hence, they are obliged to extend assistance by exercising their leadership so that the people would have direction and guidance even during the most trying times. They must be reminded through seminars and other

educational programs that their leadership is expected by the people during calamities.

The life of the barangay largely depends on the elected leaders.

Aldea (1995)²¹ identified some deficiencies in the NDCC such as lack of direction, coordination, and awareness amongst concerned disaster agencies. This observation was valid in many instances in the past disaster operations conducted at the lower levels of the national government. The effects of the calamities seem to overwhelm everybody, in which case, confusion normally takes its course. This can be attributed to lack of contingency plans which are embodied in the fundamental principles and guidelines in disaster response operations at every level and in any agency of the government. It would seem that only the military organization possesses this capability.

The last but not the least principle to be discussed is the eight policy which gives emphasis that exercises and drills are to be conducted at all levels, principally at the barangay level. This policy involves the active participation of the Barangay Disaster Coordinating Council (BDCC) and supervised by the municipal government. It should not be simply delegated to the barangay leadership. This does not mean micromanaging or usurping of authority. But supervision must be properly initiated by the higher level of government. This would involve funds to facilitate the conduct of these activities. Hence, proper coordination and supervision should be done at the municipal and provincial levels. In any way, when calamity strikes, the whole province, at the least, is affected; hence, there should be synergy and synchronization of all capabilities available in order to maximize the full potential of the locality against any disaster.

Another critical assessment on the different tasks of the Department of National Defense through the Armed Forces of the Philippines can also bring revision and updating of the Philippines disaster response capability.

In 2000, Arcilla²² proposed for the creation of a manual which will provide the guideline on disaster management for the Philippine Army. Disaster operations were conducted by virtue of directives without doctrinal foundation. This hazardous duty should have sound and workable doctrinal basis in order for it to be institutionalized in the military organization.

The first task of DND through the AFP is to establish communication linkages and to make these available for disaster operations. This task is normally hampered by destroyed roads and bridges, and poor terrain conditions caused by floods and landslides. Furthermore, this is aggravated by lack of air transportation which could immediately bring troops on destroyed communication lines and facilities. In 2003, Dapal²³ assessed the effectiveness of the Philippine Navy in responding to disaster situations caused by floods in Metro Manila and its neighboring municipalities and cities. Dapal found out some problems encountered by the Navy in responding to flood situations in Metro Manila – the navy's inability to cover all the affected areas due to limited number of amphibian trucks, rubber boats, equipment and personnel, notwithstanding the availability of meager and insufficient funds for the rescue operations.

It is therefore imperative for the government to procure additional utility/rescue helicopters for transporting troops and communication technicians to conduct immediate restoration of destroyed and affected lines of communications. Their immediate restoration would definitely facilitate coordination and synchronization of efforts.

The second task is to assist the Philippine National Police in providing security coverage in disaster areas. The Philippine National Police (PNP) should be able to take care of the security of the area of the rescue operation in terms of criminality and lawlessness, while the rescue operations are principally undertaken by the AFP. Security is an inherent function of uniformed services; however, proper division of labor and delineation of responsibility would facilitate accomplishment of rescue operations. This scheme would lessen duplication of work and hence more work done.

Thirdly, the DND through the AFP is to assist in the reconstruction of damaged national and local roads and/or bridges, structures of facilities. This should be the primary task of the Provincial Engineering Office but oftentimes delegated to the AFP's engineering units which depletes their resources that are not immediately replenished; thereby, hampering the AFP's core tasks. The local government must preempt and make the proper proactive programs for this exigency.

The fourth task is to assist in providing transportation facilities for the rapid movement of relief supplies and personnel and for evacuation of disaster victims. This task has the same predicament with the preceding task. The local government depends so much on the mobility assets of the AFP rather than mustering the available assets of the province and municipalities concerned. This depletes the AFP units' POL resources intended primarily for combat operations which are not immediately replenished afterwards; thereby, hampering the military operations against the insurgency movements.

The fifth task is to organize reaction teams in all military installations. This task has not been given real emphasis despite repeated conduct of disaster response operations by the AFP. The divisions are conducting trainings for disaster response for the new soldiers regularly. At the least, every soldier is expected to have the basic knowledge in disaster emergency actions. However, the team training is dissipated when the new soldiers are deployed to different units of the division. And during actual disasters, all available troops are utilized for the rescue operations. In other words, the disaster training must be given emphasis which equally would need the necessary equipment ready and on standby basis for any calamity operations. These must be distinct and separate from those being utilized routinely.

It is also important to examine and evaluate the reasons why the AFP is preferred in the conduct of disaster relief operations over the other agencies of the government.

This will be another critical tool which can provide revision and updating to the capability of the government in responding to disasters.

The first reason gives the AFP full credit while the government is relegated on the sidelines. This is a positive position for the military but puts the civil government in a weak position. Excessive dependence on the military contributes to the erosion of the people's confidence in the civil government. Worse is when some uniformed elements rebel against the government, they are able to get enormous civilian support which in some cases places the civil government in almost insurmountable predicaments.

Secondly, the popularity of the military during disaster response operations is only short-lived and easily forgotten when alleged human rights violations are exploited by the insurgents. This positive image of the military emerging as people's heroes during

disasters should be exploited through strategic communication and continuous interagency cooperation after the calamity. With continuous use of strategic communication, the insurgency situation should have been relegated to simple banditry movement; and attempts of the insurgents to discredit the military organization through their exploitation of isolated alleged human rights violations by the military must be countered by citing the enormous military's role during disasters.

Thirdly, the government is in danger of losing its popular support if the military would always be perceived as the "savior" of the populace in times of calamities. The government should organize an interagency disaster response force in which the military will only be a component so that in the totality of the disaster response, the civil government should automatically get the whole credit. Again, strategic communication would play vital role in the whole effort.

The third critical assessment which can provide enhancement of the Philippines disaster response capability will be the evaluation of its Disaster Response Force (DRF) in terms of the following:

1. On Personnel. There seems to be lack of serious training on disaster response. The AFP is primarily tasked to fight the insurgency; therefore, more focus is given on combat operations and on tactics to defeat the enemies of the state. Since disaster response operation is a non-traditional role of the AFP, it is given a second or even lesser priority. However, it must be noted that natural disasters occur as normally as the change in season. It is therefore imperative to give higher importance to training the troops in the conduct of disaster response operations.

In the 2003, Ortilla²⁴ made an assessment of the capability of the National Capital Region Disaster Response Task Group (NCR DRTG) in disaster preparedness and response in terms of contingency plans, communication equipment, education and training, alerts and modification, notification and information dissemination and evacuation/rescue and relief and how this capability be enhanced to effectively respond to calamities and disaster in Metro Manila. Interviews and surveys revealed that the task units felt the need for equipment. Furthermore, there was the need for extensive and continuous training of emergency personnel on disaster management and improvement of communication for better coordination during disaster operations.

The personnel also lack motivation on disaster response operations. As far as value formation is concerned, the disaster response responsibility of the military personnel should be incorporated in the Troop Instruction and Education (TI&E) so that the importance of disaster response will be inculcated; hence, proper attitude towards this non-traditional role will be enhanced. Also, incentives and awards must be given a priority by the commanders of the units responding to natural calamities. This will boost the morale of the troops and personnel; thereby, increasing the efficiency of the operations.

Another important aspect on personnel is the lack of dedicated units for disaster response operations. Ver (1996)²⁵ emphasized the need to have a dedicated military force which will perform counter-disaster role during calamities. Ver cited some factors that influence the effectiveness of the disaster response operations. He mentioned that organization of the responding unit was important to facilitate actions during the actual operations. He also cited the need for proper coordination among the

military commanders and the local government officials to avoid confusion and misunderstanding. Planning for preparedness was also given emphasis to be effective.

There should be proper distribution of tasks for the personnel for combat operations as well as for disaster response operations. Proper distribution of tasks will avoid over-burdening of units specially those at the frontlines. Also, proper delineation of authority during the conduct of disaster relief operations must be observed to avoid confusion resulting to inefficiency. A closer examination on the number of personnel assigned at the headquarters should be observed so that line units will be filled up for combat operations and those left at the headquarters be given the task dedicated for disaster response operation.

2. On Equipment. There is apparent lack of appropriate equipment for disaster response operations. As observed by the previous studies, the government should provide the rescuers the necessary equipment to facilitate the operations and minimize loss of lives and properties, and alleviate suffering of the affected populace. A study was conducted by Marcos²⁶ in 2003 that assessed the utilization of the Philippine Army reservists in disaster relief and rescue operations. Marcos found out that there was lack of disaster response equipment and so the reservists were forced to use their personal equipment.

In his research, Sagrit (2002)²⁷ proposed for the creation of a company-sized unit dedicated to disaster response operations of the 51st EBDE, PA in support of the PA NCR DRTU. He found out that there were inadequacies in the organizational structures and personnel fill-up. Furthermore, Sagrit learned that the personnel were poorly trained or unskilled in responding to disaster scenarios. Also, Sagirt realized that

practically the personnel were left with only the basic and minimal hand tools like shovels, picks, crowbars and the likes; thereby exposing the troops to greater danger while conducting the rescue operations.

The study by Amodia (1996)²⁸ proposed the need to formulate a contingency and preparedness plan for disaster response at the infantry brigade level to be able to respond immediately to prevent loss of human lives, minimize damage of properties and lessen human suffering. He found out that tactical units in the field have lukewarm attitude in preparing for calamities. This was due to lack of the required equipment for disaster operations, lack of funds to provide support for such operation and lack of training. He recommended that the Headquarters Philippine Army should program for the procurement of the necessary equipment for the Disaster Response Task Unit (DRTU) and that the funds for the training of DRTU personnel be provided.

Another observation reveals the lack of durable/quality equipment for disaster response operations. It has been observed also that equipment easily breaks down during the actual conduct of the disaster operations causing delays and stoppages of the rescue operations. The government must procure more quality equipment to ensure their reliability during the operations.

There is also lack of dedicated equipment for disaster response operations. There should be dedicated equipment primarily for disaster response operations use only. In this way, the government would have ready reliable equipment which can be brought to the disaster area on short notice. This would save time and effort looking for available equipment during times of emergencies. Lack of availability of dedicated equipment results in: over usage of equipment available; poor maintenance

of equipment causing break downs during actual operations; and, losses of equipment due to poor accounting and management during and after operations.

3. On Budget. Insufficient funding during disaster response operations which causes delays in the delivery of necessary equipment and materials needed in the actual work. A study by Pilar (1999)²⁹ assessed the disaster preparedness in the National Capital Region/Metro Manila in terms of planning, organizing, staffing, controlling and providing the budget, and facilitating its effective utilization. He found that planning and organizing appeared to be in place. Planning at the top to develop a coherent and well-coordinated strategy has been a continuing concern for National Disaster Coordinating Council headed by the Secretary of National Defense. With respect to organizing, Pilar found no specific data on staffing and budgeting. Funding used to be a source of inefficiency because the money could not be used for preparedness measure. Also, unavailability or late release of needed funds due to bureaucratic processes and sometimes no fund available for the emergency.

Finally, the Philippine disaster response capability can also be enhanced by the evaluation of the NDCC Disaster Management Cycle. In the mitigation phase of disaster management, the programs such as information dissemination and training are obviously not given top priority especially in the localities frequently visited by natural calamities because the primary concern of the people and the local government leadership is their livelihood; hence, any program regarding disaster are but simple information drives not worth giving much of their time. In other words, the higher levels of government or the national government should be aggressive to conduct such

programs and training to better prepare the people for the coming disasters. This would definitely lessen death, suffering and loss of lives and property.

In the preparedness phase which precedes the mitigation phase, the status of preparedness of the people depends upon the aggressiveness of the mitigation stage in the disaster management cycle. The problem here is the equipment and the funding for the necessary training and other activities geared towards strengthening the people's capability to survive the calamity.

The third phase is the response. This is primarily done by the AFP being the sole government agency with the capability to respond immediately to calamity victims. Then after the local government regains momentum, other agencies also follow the AFP with the help of volunteer NGOs and private entities. They normally provide food, temporary shelter, equipment and materials needed by the affected people. Medical supplies and assistance are also provided by local agencies as well as international organizations. Financial assistance is also donated to the local government concerned for the needs of the people.

The last phase is rehabilitation which is normally referred to the restoration or reconstruction of the major public infrastructures damaged by the disaster to their normal status so that these could be utilized again by the people. However, this process normally takes a little longer than the other phases due to the availability of funds and the length of the duration of their constructions.

Disaster Response Capabilities of Other Countries

United Nations Regional Commissions – Economic and Social Commissions for Asia and the Pacific (ESCAP, 1999)³⁰ highlighted some of the disaster management of four (4) countries, in particular, China, Bangladesh, India and South Korea:³¹

In China, the government attaches great importance to its efforts to reduce the effects of disasters. Its approach to mitigate these catastrophes involves the principle of comprehensive disaster management, which combines economic development with disaster reduction and includes such measures as disaster prevention, mitigation, relief and rehabilitation in promoting social stability and protecting the life and property. China has made a concerted effort to improve the management function required to ensure a fully integrated and efficient natural disaster reduction system, which is tailored to meet China's own special needs. This has involved the promulgation and enforcement of appropriate laws and regulations; the vertical and horizontal integration of relevant government departments according to their respective fields of competence; the application of engineering and non-engineering measures; the raising of public awareness; improved hazard monitoring and early warning systems; the formulation of disaster control plans based on risk assessment; the application of science and technology in mitigating disasters; increased education and training in natural disaster reduction; and the fostering of the growth of disaster NGOs.

In order to combat the major disasters, the Bangladesh government pursued a vigorous program of disaster management. This program gave the initial priority to improvement in the forecasting and early warning system for cyclones and floods, along with emphasis on emergency response and relief. Subsequent initiatives have involved prevention and preparedness measures with bias towards infrastructure development,

such as the construction of coastal dikes and river embankments. Multi-level initiatives are being pursued which include; awareness and education programs; decentralized planning and community participation in disaster mitigation and response; and incorporation of disaster management and reduction in development projects.

In his study in 2000, Quamruzzaman³² said that the organization of the Bangladesh Army is well suited for operations in disaster operations. The army has quick reaction capability and can respond rapidly, taking its own management, communication and administrative systems in a self-contained, self-sustained and highly mobile form. The officers and men are well trained fulfilling the need to perform professional and functional activities. However, constraints are due to lack of adequate arrangements in legislation to ensure its availability to support the civil community and administration in responding to disasters. Civil-military cooperation is complicated since the military operated outside the normal chain of command, which linked the system of central and local government in supporting public and emergency services. The situation also is made more complicated as some army commanders had different set of responsibilities and loyalties from those of the central and local government officials who required for their support. Also flow of funds is complicated by the different authorities involved in the disaster response. The military and civilian authorities are in competition to demonstrate their own capabilities sometimes affecting the disaster management activities.

The government of the Republic of Korea was able to reduce damages caused by natural disasters which can be attributed to its improved disaster management planning initiatives. The most significant initiatives have involved the following: streamlining of the

instructional framework for natural disaster prevention and preparedness into a single agency; comprehensive revision of the Natural Disaster Counter Measures Act which incorporated comprehensive disaster prevention measures, provision of adequate funding for operational aspects and the encouragement of private participation in disaster mitigation; the placing of greater emphasis on scientific research in the field of disaster prevention; and, the formulation of a 5-year Disaster Prevention Plan directed towards the implementation of measures covering forestation, flood control, disaster prevention, and technology development. To cope with the fact that disaster are becoming more varied and larger in scale, the Korean government is continuing its effort in the field of disaster reduction by concentrating on certain aspects such as: streamlining land development regulations; availability of flood insurance; greater investment in flood control; systematic scientific research for disaster prevention; development of disaster management system; and active international cooperation.

The main water-related disasters affecting India are tropical cyclones, floods and droughts. The responsibility for natural disaster management is spread over the various tiers of government, with State governments assuming the primary role in disaster rescue and relief measures. At the national level, the Ministry of Home Affairs and Ministry of Agriculture are the tasked agencies. The central government supplements the states' activities by providing substantial financial support and other forms of assistance. India is directing its efforts towards the linking of disaster mitigation with development planning, the establishment of more effective communication systems, the use of the latest information technology, the introduction of disaster insurance, the employment of extensive public awareness and education campaigns, particularly in

rural areas, the greater involvement of the private sector, and the strengthening of institutional mechanisms and international cooperation.

Recommendations

Most of the times in the past, the Philippine government's response to every calamity was, indeed, disastrous in itself. It is almost always as if the calamity first struck the country. The government does not retain institutional memory. It is lamentable that much destruction have come and gone, ravaged the country many a times, but the government seemed not to learn at all from every disaster. Perhaps, too much optimism that no more calamities will ever reoccur makes the government complacent to take steps to improve the prevention, mitigation and response to a calamity. Too little has been done to improve the capability of the government, including the AFP, to its disaster response ability. Too much reliance to the sole organization, the AFP, which has the only capability to unilaterally conduct search, rescue, relief and rehabilitation operations, has made the government adamant to place top priority to improving its disaster response capability.

It is also noteworthy that the Philippines has been a recipient of several international humanitarian assistance from other countries, regardless of their economic status. Similarly, the country has been recipient to the UN humanitarian missions when the Philippines had been ravaged by natural disasters in the past. It is therefore imperative that the government consider putting top priority in improving her disaster response capability; so that she can somehow repay morally those valuable assistance and support extended her by the UN and the international community.

In the foregoing related studies about other countries' disaster response management and capabilities, the focus lies on the government's responsibility to initiate the overall action in disaster response. Coordination with its lower levels of governance is emphasized to facilitate and ensure that services are downloaded to the victims immediately during disasters. Proper planning and managing of the situation had been given priority which contributed to the systematic discharge of responsibilities during calamities. Hence, efficiency in the disaster response capabilities accentuates the delivery of services.

The local studies showed that there were defects and deficiencies in the management of disaster response schemes in the government as well as in the AFP. Emphases and considerations were mentioned on the role and utilization of the Phillippine Army reservists in the conduct of disaster operations, the need for the creation of dedicated unit which will be ready to respond immediately during disasters, focus on improving the policies and guidelines in the disaster response management in terms of planning, organizing, staffing and budget support. Other studies focused on the capability and effectiveness of the disaster response organization. Those studies revealed the following observations: lack of equipment, training and sufficient funds to support the disaster response operations. There were deficiencies in organizational structures, delineation of authority, division of labor and some management schemes.

The Armed Forces of the Philippines is regarded as an important and capable entity for disaster management due to its training, equipment, and organizational structure.³³ It is the forefront organization which the people could rely upon during disasters. However, the AFP disaster response capability needs upgrading and possibly

modernization primarily in terms of organization, training and equipment in order to become more relevant in this high-technology era and therefore improve its effectiveness. It should be equipped with the necessary updated equipment in order to improve the troop's capability in disaster operations. Better inter-agency and international trainings should be given the troops and personnel in order to make them compatible in working with other agencies and nations. In this way, the AFP would be prepared to conduct disaster operations in other countries.

In addition to the cited schemes in improving the Philippines disaster response capability, it is also recommended that the Philippine government create a standby unit, possibly a battalion, which shall be charged primarily with disaster operations. It shall be composed of trained troops, medical personnel (both civilian and military), and shall be equipped completely for disaster response operations only. This unit can be utilized in short duration endeavors and missions while designated as the disaster response unit. The military personnel can be rotated on a regular basis or the whole unit could be changed by other battalions with the same composition. This could be a venue for a regular rotation or battalion retraining scheme. With this composite unit, the Philippines would be able to have a force the whole year-round, ready to conduct disaster operation anytime and anywhere, locally or assist other countries during calamities.

The study concludes that the Philippines need to prioritize the improvement of its disaster response capability in order to respond efficiently and effectively to disaster operations locally and also internationally. This project would enable the country to send the appropriate contingency force, not for peace keeping as a result of war, but one that would be able to assist in the natural disaster response operations in other countries if

needed to. This will put a higher premium to the Philippine government's prestige. This will develop better friendship and enhance goodwill with other nations – a strategic approach to international peace.

Endnotes

- ¹ Federal Response To Hurricane Katrina: Lessons Learned, February 2006.
- ² "Disaster," available from en.wikipedia.org/wiki/Disaster; Internet; accessed 30 October 2007.
 - ³ Ibid.
- ⁴ Ibid. (Man-made calamities are excluded in this study because they normally need human intervention and investigation. The possibility of preventing them from occurring could be controlled by man. Therefore, while the response needed is immediate, their resolution is still subject to investigations and other time-consuming imperatives. On the other hand, natural disasters need immediate response and, as quickly as possible, their resolution must also be immediate in order to mitigate the effects which cause human sufferings and destruction of properties. This study primarily focused on the latter kind of disaster which is beyond human control.)
- ⁵ "Disasters," available from http://www.nsf.gov/news/special_reports/disasters/index.jsp; Internet; accessed 30 October 2007.

- ⁷ Isagani S Yaco, *Capability Analysis of Philippine Army Disaster Response Task Unit in the Conduct of Disaster Operations in Manila Focus on Earthquakes*, Thesis (Camp Aguinaldo: National Defense College of the Philippines, 2006).
- ⁸ In the report of damages of the Extreme Climate Events Related Disasters (2000 to 2005) by the Office of Civil Defense, DND, CGEA, Quezon City, Philippines, more than 50 strong disasters such as typhoons, flashfloods, mudslides, earthquakes, heavy rains and droughts ravage the country leaving more than 100 people dead and more than P5,000,000.oo damages annually.
- ⁹ Dionisio Magsipoc, "Disaster Management Capacity Building The Asia Disaster Preparedness Center Paves the Way," *The Liaison Center of Excellence DMHA Hawaii*, Vol. 2 No.1 April-June 2000; available from http://www.coe-dmha.org/Liaison/Vol_2No_1/Feat04.htm; Internet; accessed 15 November 2007.
- ¹⁰ Vivek Venkatraman, *Disaster Management of Earthquakes in the Philippines*, Commandant's Paper (Camp Aguinaldo: Armed Forces of the Philippines Command and General Staff College, 2005).

⁶ Ibid.

- ¹¹ Presidential Decree 1566, Philippines, 1978.
- ¹² NGOs like the Rotary Clubs, Kiwanis, Lions Club, YMCA, religious groups and other non-governmental entities which volunteer their services to assist the government in providing foods, goods, services and even financial donations to the calamity-stricken populace.
- ¹³ National Disaster Coordinating Council Calamities and Disaster Preparedness Plan, 1988.
 - ¹⁴ Yaco, 1.
- ¹⁵ Philippine Army, *Philippine Army Manual on Disaster Operations*, Section 2-7, PAM 3-0044 (Interim), (Doctrine Center, TRADOC, Philippine Army, Fort Andres Bonifacio, Taguig City, Metro Manila, November, 2007).
 - ¹⁶ Ibid.
 - ¹⁷ Ibid, 2-4.
- ¹⁸ Report of damages of the Extreme Climate Events Related Disasters (2000 to 2005) by the Office of Civil Defense, DND, CGEA, Quezon City, Philippines.
- ¹⁹ Simeon V. Inciong, *An Assessment of the National Emergency Preparedness Program on National Disaster*, Thesis (Camp Aguinaldo: National Defense College of the Philippines, 1985).
- ²⁰ Sheila I. Insauriga and Jean C. Tayag, "Organizational Response to the July 1990 Luzon Earthquake," (Philippine Institute of Volcanology and Seismology, Manila, 2001).
- ²¹ Elma C. Aldea, *Enhancing Disaster Response Capabilities of Disaster Agencies and the Public*, Thesis (Camp Aguinaldo: National Defense College of the Philippines, 1995).
- ²² Celso M. Arcilla, *Army Disaster Management Manual: A Proposal*, Commandant's Paper (Fort Bonifacio: Command and General Staff College, Philippine Army, 2000).
- ²³ Nelson Dapal, *Capability of the Philippine Navy in Disaster Management: Focus on Flooding Incidents in Metro Manila*, Thesis (Camp Aguinaldo: National Defense College of the Philippines, 2003).
- ²⁴ Renato A. Ortilla, *Capability Analysis of the National Capital Region Disaster Response Task Group in Disaster Preparedness and Response: Its Implication for National Security*, Thesis (Camp Aguinaldo: National Defense College of the Philippines, 2003).
- ²⁵ Roberto C. Ver, *To Determine the Need to Dedicate Military Forces in the Counter-Disaster Role to Enhance AFP Capabilities on Calamity on Disaster Operations*, Commandant's Paper (Fort Bonifacio: Command and General Staff College, Philippine Army, 1996).
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- ²⁷ Jose R. Sagrit, *A Proposal to Create the First Response Company of the 51*st *Engineer Brigade, Philippine Army*, Commandant's Paper (Fort Bonicaio: Command and General Staff College, Philippine Army, 2002).
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- ²⁹ Nestor Pilar, *An Assessment of the Disaster Management in the NCR/Metro Manila*, NDCP Occasional Paper (Camp Aguinaldo: National Defense College of the Philippines, Volume II No. 3, 1999).
- ³⁰ ESCAP Report: Current State of Readiness in ESCAP Region, Bangkok, February 1999, pp. 23-26.
 - ³¹ Yaco, 60.
- ³² Mohammad Quamruzzaraman PSC, *Bangladesh Army in Disaster Management*, Commandant's Paper (Fort Bonifacio: Command and General Staff College, Philippine Army, 2002).
 - ³³ Philippine Army Manual (PAM 3-0044), 2-7.